



Immunize Utah

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Administering Combination Vaccines

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Due to the development of new vaccines and the licensure of combination vaccines, the recommended childhood and adolescent immunization schedule has become more complex and can be confusing to parents and providers. In an attempt to simplify the schedule and reduce the number of injections a child receives, several combination vaccines have been developed. However, if these vaccines are given incorrectly, they can leave a patient inadequately immunized and in some cases, needing additional injections. The following is a list of some combination vaccines, specific information regarding licensure, and immunization recommendations:

Pediarix* contains DTaP/Hepatitis B/ Polio and is licensed for children six weeks to seven years of age. Pediarix is approved for the first three doses, usually given at 2, 4 and 6 months. **It is not approved for fourth or fifth (booster) doses.** A dose

of Pediarix *inadvertently* administered as the fourth or fifth dose of the DTaP or IPV series does not need to be repeated. Pediarix may be used interchangeably with other pertussis-containing vaccines.

Comvax* is a combination Hepatitis B/

Hib vaccine. It is licensed for use at 2, 4, and 12-15 months of age. This vaccine can be used any time either vaccine is indicated and the child is at least six weeks of age.



*These vaccines are not licensed for children younger than six weeks of age, and can not be used for the birth dose hepatitis B or at one month of age for children on a 0-1-6 month hepatitis B vaccine schedule. Comvax and Pediarix can be given to infants at least six weeks of age whose mothers are HbsAg positive or status is unknown. Children who receive birth dose hepatitis B followed by a primary series of Comvax or Pediarix will receive a total of four doses of hepatitis B vaccine.

TriHIBit is a DTaP/Hib combination vaccine. This product is licensed for **fourth dose only**, and can not be used for the primary series at 2, 4 and 6 months. It may be used as a booster dose in children over 12 months of age following any Hib vaccine. The booster dose should not be given less than two months following the prior dose. TriHIBit should **not** be used if a child has not received any prior doses of the Hib vaccine.

Twinrix is a combination Hepatitis B/Hepatitis A vaccine, approved only for persons 18 years and older. This product should never be used for childhood or adolescent immunizations when the patient is under 18. The vaccine is administered in a three dose series at 0, 1 and 6-12 months.

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Mi CASA, Su CASA, Who CASA? What house are we talking about anyway?

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Ever hear someone talk about CASA and wonder what it is?

CASA is another one of those wonderful acronyms. It stands for *Clinical Assessment Software Application (CASA)*: a free software program designed and available from the National Immunization Program (NIP) at the CDC. The purpose of the software is to analyze a clinic's patient immunization records and provide an assessment that will assist the provider in improving their office immunization procedures, resulting in improved immunization rates. In other words, CASA will help an office determine if the children in their prac-

tice are getting all of the recommended immunizations at the appropriate age.

CASA also identifies areas of strength and/or weaknesses in the clinic, thus providing offices with an opportunity to problem solve. Identification of the specific vaccine or age frame where immunization rates begin to slip allows offices to create and implement procedures for improvement.

Provider representatives from the *Vaccines for Children (VFC)* Program frequently include a CASA assessment during their site visits. The provider representative reviews the assessment and identifies the immunization rates at various ages, and determines any missed opportunities or weaknesses. Clinics can also use CASA to perform their own assessments any time in between the VFC provider representative's visits.

The CASA software can be downloaded free from the CDC/NIP website <http://www.cdc.gov/nip/casa/default.htm>. Once you have downloaded the CASA software, you will need to enter patient immunization records. The Utah Statewide Immunization Information System (USIIS) provides two methods to download patient immunization records. Completing the

immunization assessment simply requires importing the USIIS text file into CASA and printing the results. It is just that easy!

Call the Immunization Program at (801) 538-9450 and request a provider representative come to your office to train your staff on this valuable assessment tool.

New Perinatal Hepatitis B Rule

On May 16, 2005, R386-702-9 "Special Measures to Prevent Perinatal and Person-to-Person Transmission of Hepatitis B Infection" became effective.

The two main aspects of the rule are: 1) to require providers to test pregnant women for hepatitis B, "A licensed healthcare provider who provides prenatal care shall routinely test each pregnant woman for hepatitis B surface antigen (HBsAg) at an early prenatal care visit;" and, 2) to report any case of hepatitis B, "Each positive HBsAg result detected in a pregnant woman shall be reported to the local health department or the Utah Department of Health, as specified in Section 26-6-6."

Additionally, the rule will help ensure hospital policy for testing and monitoring hepatitis B: "Every hospital and birthing facility shall develop a policy to assure that: (a) when a pregnant woman is admitted for delivery, or for monitoring of pregnancy status, the result from a test for HBsAg performed on that woman during that pregnancy is available for review and documented in the hospital record".

To read the full text, visit <http://www.rules.utah.gov/publicat/bulletin/2005/20050201/27496.htm>

Acute Bacterial Meningitis

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Recent media reports have drawn attention to the vaccine preventable disease, bacterial meningitis. While discussion about this less familiar disease may be on the rise, the actual number of meningitis cases may not be as significant as indicated, according to epidemiologists.

Meningitis is the inflammation of the membrane of the spinal cord or brain. The symptoms of meningitis include severe headache, fever, and stiff neck. Meningitis can either be acute, where symptoms develop rapidly over hours, or chronic, where symptoms can develop very slowly over weeks or even longer. There are many causes of acute and chronic meningitis, including bacteria, viruses, fungi, amoebae, parasites, as well as non-infectious causes, such as neurosurgery, drug reactions, etc.

The most dramatic presentation of meningitis falls under the heading of acute bacterial meningitis or ABM. This is a severe and rapidly progressing illness that can be life threatening, even when appropriately treated with antibiotics. Because this disease can cause rapid illness (including death or neurological sequelae) in young, healthy individuals, there can be a significant amount of community concern associated with cases.

Fortunately, while ABM is a very serious disease, it is also fairly rare. Nationwide, the incidence of ABM ranges from 2.5-5 cases per 100,000 people per year. Therefore Utah would expect to have about 50-100 cases annually. People who are very elderly or very young are at highest risk of the disease.

The most common causes of ABM are:

Infants:

Streptococcus agalactiae (also known as Group B Strep)

Haemophilus influenzae type b

Escherichia coli

Listeria monocytogenes (gram positive bacteria found in food)

Children:

Neisseria meningitidis

Streptococcus pneumoniae

Haemophilus influenzae type b

Adults:

Neisseria meningitidis

Streptococcus pneumoniae

Listeria monocytogenes

Primary public health measures, such as screening and immunization, have helped reduce the incidence of ABM. For example:

Streptococcus agalactiae (Group B Strep) –

Routine screening of pregnant women for its presence has reduced the rate of this disease in infants.

Haemophilus influenzae –

The *Haemophilus influenzae* type b (Hib) vaccine, a routine childhood immunization, has helped reduce the incidence of Hib invasive disease (such as meningitis or sepsis) by greater than 95%. The primary series is recommended for all infants beginning at two months of age with a booster dose at 12-15 months of age. The number of doses (two-three) in the primary series depends on the type of vaccine used. For children starting the series late, the number of doses depends upon the child's current age.

Streptococcus pneumoniae –

The Pneumococcal Conjugate vaccine is also a routine childhood immunization specific for children under two years of age. The vaccine is effective against the most common types of the disease, such as pneumonia, bacteremia and meningitis. The primary series of three doses is recommended beginning at two months of age with a booster dose at 12-15 months of age. For children starting the series late, the number of doses depends upon the child's current age.

Neisseria meningitidis –

A new conjugated vaccine, Menactra, is now available that protects against this type of bacteria. The new vaccine covers the strain that has predominated in Utah for the past several years. This vaccine is given as a single dose, and is approved for individuals aged 11-55 years of age.

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MMR contains Measles/Mumps/Rubella vaccines. These vaccines are generally only available as a combination MMR vaccine in the United States. However, some patients who received vaccinations outside of the United States may have received the single antigens. **MMR vaccine should be given on or after a child's first birthday (or at 12 months of age).** A second dose of the measles vaccine is also recommended, usually given after the fourth birthday.

Diphtheria/Tetanus containing vaccines - There are several Tetanus/Diphtheria containing vaccines. These products are not interchangeable and caution should be used to ensure appropriate administration.



DTaP* is a combination Diphtheria/ Tetanus/Pertussis vaccine, licensed for children six weeks to seven years of age. The primary series is recommended at 2, 4, and 6 months of age. A child should receive an additional dose of DTaP between 12 and 18

months. The fourth dose (booster) is recommended at least six months after completion of the primary series. The final booster dose of DTaP should be given between ages four and six years.

Pediatric DT* is a combination Diphtheria/Tetanus vaccine, licensed for children six weeks to seven years of age. Pediatric DT should be used only when a child has a valid contraindication to pertussis. If the child was younger than 12 months old when the first dose of DT was administered, a total of four primary DT doses should be given. If the child was 12 months of age or older at the time the first dose of DT was administered, three doses will complete the primary DT series.

*DTaP and DT are not licensed for children on or after their seventh birthday. Recently, the FDA approved a new tetanus toxoid, reduced diphtheria toxoid and acellular pertussis vaccine, **Boostrix**, for individuals 10-18 years of age.

Td is a combination of Tetanus/Diphtheria licensed for children seven years of age and older, and for adults. The first Td booster dose is recommended at 11-12 years of age, if there has been at least five

years since the last dose of DTaP or DT was given. A Td booster is recommended every ten years, thereafter. The number of doses in a primary series depends on whether the person has received prior doses of a diphtheria-containing vaccine and the age the doses were administered. For children who have received prior diphtheria-containing vaccines, refer to the DTaP or DT schedule. For unvaccinated persons seven years of age and older, the primary series consists of three doses. The first two doses should be separated by at least four weeks and the third dose given at 6 to 12 months.

References: Epidemiology and Prevention of Vaccine Preventable Diseases, 8th Edition, 2nd Printing, January 2005.

USIIS Online User Survey

The Utah Statewide Immunization Information System (USIIS) has developed an online User Survey regarding the USIIS system. The survey will be available online until May 31, 2005 on the Webkids website at <https://webkids.usiis.org/>. Users will be prompted to take the survey each time you log-on to USIIS, until the survey is completed. The survey will take approximately 15 minutes to complete. Please take the time to complete this survey as your input is important to us.

Tips for Using Remaining Flu Vaccine

Please Help! We still have flu vaccine available.

Does this sound familiar? Many providers have reported that they still have flu vaccine. Here's a tip that may help.

- **Don't forget to give a dose to the infants who just turned six months of age and coming in for their series. If one dose of the flu vaccine is given this season while you have the supply, the child will only need one dose next season. Providers have until the end of June 2005 before the vaccine expires.**

Flu seasons and supplies are very unpredictable. So be smart and vaccinate those kids now! In addition, these infants will receive protection for the current season, including travel to widespread flu activity areas.

Geographic Information System

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Capability for the Geographic Information System (GIS) was recently implemented in Utah Statewide Immunization Information System (USIIS). GIS is a mapping tool that can identify immunization trends within specific geographic areas. For example, GIS may be used to target pockets of need by mapping areas throughout the state with low immunization rates.

Additional types of data analysis might include comparing areas where low immunization rates occur versus the number of immunization provider sites. The smallest geographical area that can be mapped is zip code area and can include roads, city names, mountains and bodies of water.

The mapping information is based on data contained in USIIS, including provider information, patient age, shot record and address. While patient information is used to identify specific areas, the final data is reported as aggregate. Therefore, to achieve accurate information using GIS capability, it is critical that the patient's complete shot record and address, including zip code, are entered into USIIS and kept current.



As more immunization information is entered into USIIS by the users, more data to analyze will become available.

In short, GIS can provide various options to identify trends or compare data - *if* the information is entered into USIIS. If you are a USIIS user, please ensure your patient information is as accurate as possible.

USIIS User Group Meetings

The Utah Immunization Program and the Utah Statewide Immunization Information System (USIIS) are establishing USIIS user group meetings. These meetings are designed to allow individuals using USIIS to participate in group discussions regarding USIIS functions, capabilities, needs, updates, etc.

MISSION

To establish and maintain open communication between USIIS users and Utah Department of Health (UDOH) staff.

PURPOSE

- Networking: user-to-user as well as user-to UDOH staff
- Promoting continued use of USIIS
- Problem-solving
- Addressing user wants and needs
- Learning about the latest tools and updates
- Collecting feedback for future upgrades

STRUCTURE

- Users facilitate user group meetings
- Agendas are developed by the users
- Meetings will be held quarterly
- Regional user groups
- Discussions are relevant and of interest to all attending

A USIIS user meeting was recently held in Salt Lake City on April 22, 2005 at Cottonwood Hospital. JoLynne DiFrancesco presented on "Implementing USIIS into your Clinic Flow" and how to use the Patient Forecast. This meeting generated good discussion and suggestions for changing the Patient Forecast tool.

The next USIIS user meeting is scheduled for August 4, 2005, 7:00 a.m. at Cottonwood Hospital in Salt Lake City. For more information regarding user meetings or to establish a user group in your area, please contact Janel Jorgenson at (801) 538-9991.

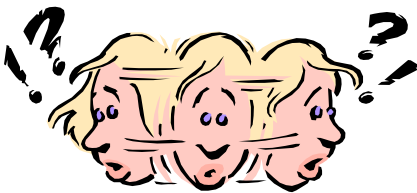
Deciphering Vaccine Funding Sources: Medicaid, VFC and CHIP

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Funding for the Vaccines for Children (VFC) Program comes from three different sources: Federal, State and CHIP allocations. The funding is determined based on the child's eligibility status.

Children who receive federally funded vaccines are children without any health insurance, children receiving Medicaid benefits and children claiming American Indian or Alaskan Native status. Children who are underinsured and served at a *certified* Federally Qualified Health Center (FQHC) or *certified* Rural Health Center (RHC) clinic are also served through Federal funds.

In Utah, there are also State funded vaccines for underinsured children served at all facilities other than certified FQHC or RHC clinics. *Underinsured* is defined as children who have health insurance, but



their insurance does not cover immunizations, or does not cover immunizations for certain antigens. Children who have high deductibles are

considered insured and do not qualify for State or Federally funded vaccines.

Children receiving CHIP benefits are served through the VFC distribution system. However, the CHIP Program pays for the vaccine used for CHIP eligible children.

NOTE: Eligibility ends for all children as of their 19th birthday, regardless of funding source.

To ensure accuracy in funding, it is crucial that VFC providers report their quarterly doses administered correctly. Many providers have found it difficult to determine if a child is receiving Medicaid or CHIP.

If a child qualifies for VFC through Medicaid, their Medicaid card must be current for the month in which the service date occurred. The Medicaid card can be a Utah Medicaid card or an out-of-state Medicaid

card, as long as it is current. Utah Medicaid cards will identify the patient as being on State Medicaid, IHC ACCESS, Molina or Healthy U. All cards should look the same, except for the name of the insurance carrier listed.

If a child is CHIP eligible, the card will look similar to a private insurance card. There are only two insurance carriers for the Utah CHIP program: PEHP and Molina. Only children on Utah's CHIP program can be served using Utah VFC vaccine. No children eligible for an out-of-state CHIP program can be served. If the patient is on PEHP CHIP, they will have an insurance card that looks similar to other PEHP plan's insurance cards. However, it will have the CHIP logo on it identifying the patient as having CHIP insurance. The Molina CHIP card will not be a Medicaid card. Instead it will be an insurance card that will say Healthy Kids or Healthy Kids Plus. Molina does not insure anyone who is not enrolled in Medicaid or CHIP.

If VFC providers have additional questions regarding VFC eligibility or Quarterly Doses Administered Reports, please contact the Utah VFC Program at (801) 538-9450.

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Acute Bacterial Meningitis

The Advisory Committee on Immunization Practices (ACIP) recommends that the following groups should consider receiving the conjugated meningitis vaccine:

- Adolescents aged 11-12 years at their preadolescent assessment visit.
- Adolescents entering high school who have not been previously vaccinated.
- College freshmen living in dormitories.
- Adolescents between the age of 11-18 who are visiting a country where *N. meningitidis* is hyper-endemic or epidemic.
- Adolescents between the age of 11-18 with terminal complement deficiencies, those who are asplenic, and those infected with HIV.

For more information on acute bacterial meningitis in Utah, contact the Bureau of Epidemiology at (801) 538-6191.

Vaccine Storage and Handling Quiz

1. Which area in the refrigerator is recommended for vaccine storage?
 - a. Anywhere in the fridge except in the door and crisper drawer.
 - b. In the middle of the compartment, away from the walls, floor, and cold air vent.
 - c. In the back of the fridge where the cold air blows.
2. How long should you keep refrigerator and freezer daily temperature check logs?
 - a. One month.
 - b. One year.
 - c. Three years
3. Which type of container is recommended by the Utah VFC Program for storage of vaccines on the shelves of the refrigerator?
 - a. Plastic baskets with slotted sides, wire baskets, and trays.
 - b. Plastic containers with lids, so vaccines can easily be stacked.
 - c. Baggies of vials with the vaccine type and lot number clearly marked.
 - d. All of the above are acceptable for storage as long as they are marked.
4. What area in the refrigerator is recommended for thermometer placement?
 - a. In the center of the compartment, on the middle shelf, adjacent to the vaccines.
 - b. On the top shelf where the temperature is the coldest to alert of freezing ranges.
 - c. Adjacent to vaccines stored on any shelf except in the door and crisper areas.
5. If a dose of expired vaccine is administered, what should you do?
 - a. Check the expiration date. Expired vaccines are OK for 7 days after expiration.
 - b. Contact the vaccine manufacturer. Each vaccine type is different.
 - c. It is considered an invalid dose. Call the child back for revaccination.

Quiz answers on back page

Kudos To Providers!



The Utah Immunization Program is proud to recognize outstanding efforts in immunizing Utah's children. We are pleased to recognize the following providers for rates shown during recent immunization assessments from January 2005 - April 2005 using the Clinic Assessment Software Application (CASA).

For achieving the goal of immunizing 80% or more of two-year-olds with 4 DTaP, 3 Polio, 1 MMR, 3 Hib & 3 Hepatitis B:

IHC South Ogden

For achieving the goal of immunizing 70% or more of two-year-olds with 4 DTaP, 3 Polio, 1 MMR, 3 Hib & 3 Hepatitis B:

**Sandy Family Practice
Taylor/Wade Medical
Utah Valley Family Practice**



Mark Your Calendars! 2005 Events

Adolescent Immunization Awareness Week

Date: June 5-11, 2005

For more information, contact Nasrin Zandkarimi at (801) 538-6570.

Immunization Update Satellite/Web Broadcast

Date: July 28, 2005

Website: <http://phppo.cdc.gov/phtn/default.asp>

National Immunization Awareness Month

Date: August 2005

Location: Nationwide

Website: <http://www.cdc.gov/nip/events/niam/>

USIIS User Group Meeting

Date: August 4, 2005; 7:00 a.m.

Location: Cottonwood Hospital, Salt Lake City

For more information, contact Janel Jorgenson at (801) 538-9991.



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288 North 1460 West
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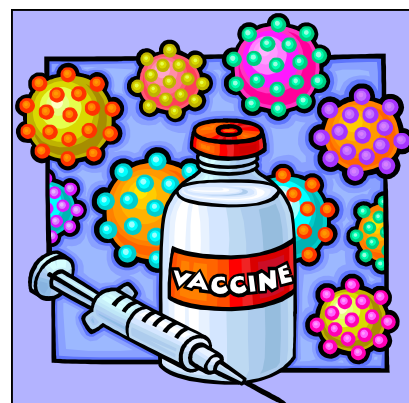


Check out our web-site!

www.immunize-utah.org

Vaccine Storage and Handling Quiz Answers

- 1. Answer: B**
In the middle of the compartment, away from the walls, floor, and cold air vent.
- 2. Answer: C**
Three Years.
- 3. Answer: A**
Plastic baskets with slotted sides, wire baskets, and trays.
- 4. Answer: A**
In the center of the compartment, on the middle shelf, adjacent to the vaccines.
- 5. Answer: C**
It is considered an invalid dose. Call the child back for revaccination.



Check out CDC's new on-line S&H training at:
<http://www2a.cdc.gov/nip/isd/shtoolkit/content.html>

Send us S&H tips on what works for your clinic and ideas on how we can improve our S&H training.
Fax or e-mail S&H questions, comments, and ideas to: Linda Jenkins PH: (801) 538-9924
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